Waterman: A learning laboratory for all Ohioans

When farmland was donated to The Ohio State University in 1923, no one could have envisioned the impact that gift would have for 95-plus years.

Thousands of Ohio State students and researchers have benefitted from what eventually became known as Waterman Farm. As the farmland grew and evolved, so did its name.

The Waterman Agricultural and Natural Resources Laboratory is now a 261-acre plot of land at West Lane Avenue near Kenny Road on the Columbus campus.

Now a top priority for both Ohio State and CFAES, this unique asset will play prominently in the future as a master plan, partnerships, and facilities are further developed to allow for a core of learning-by-doing activities and novel discovery in areas such as agriculture, natural resources, food security, and health.

“Waterman expands the classroom from four walls to the entire outdoors and allows the university and community to engage in addressing many of the challenges facing the world today,” said Cathann A. Kress, CFAES dean and vice president for agricultural administration.

THE GRAND CHALLENGES

As a central focus of CFAES work, Kress has identified four grand challenges, all of which will influence the future of Waterman.

1. Sustaining Life. A simultaneous focus on viable agricultural production, food security and safety, and environmental and ecosystem sustainability.

2. One Health. The intersection or interaction of human, animal, plant, and environmental health.

3. Rural-Urban Interface. Exploration of the tensions and opportunities created in the communities, industries, policies, economies, and communications between rural and urban residents.


“Waterman is positioned to serve as a premier hub for teaching, research, and community engagement around these grand challenges. It will also serve as a center to help inform and educate a broader audience,” said Kress.

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THE FUTURE OF WATERMAN

Part of the plan rests in reconnecting the general public with agricultural production and addressing their distrust of science and excessive misinformation, their concern for animal welfare, and their interest in the environment and the entire food system. Some ways to do that include:

- expanding opportunities for Ohio State students to engage in hands-on learning, thus preparing the future workforce.
- displaying research around food, health, agricultural production, and sustainability.
- showcasing the breadth of Ohio agriculture, from commercial to urban, and from farms large to small.
- engaging more publicly with citizens throughout their entire life span.

NEW FACILITIES

CFAES is planning to invest more than $50 million in three new Waterman facilities within the next two years.

The $5 million Kunz-Brundige Franklin County Extension Building is under construction and will open in 2019. It will feature multifunctional meeting spaces, a teaching kitchen, and a demonstration garden.

The $35 million Controlled Environment Food Production Research Complex is slated for construction in 2019. It will include state-of-the-art greenhouse space and will expand the college’s opportunities in phenotyping, vertical farming, and aquaponics. It will also provide a platform for interdisciplinary research in horticulture, engineering, entomology, pathology, food science, computer science, and human nutrition/health.

Construction on a $15 million multispecies animal learning center is targeted to begin in early 2020. Cows, horses, chickens, swine, and sheep will be housed at the center or transported there for outreach programs. The center will bring people and animals together for hands-on learning, public events, and Extension programming.

CURRENT INITIATIVES

One Waterman partnership that has been a mainstay for many years is between its 100-cow dairy farm and the Ohio Dairy Producers Association. The new multispecies animal learning center will include a modern robotic milking system.

“It’s exciting that Ohio State is looking to represent our past by linking it to the future,” said Scott Higgins, chief executive officer of the Ohio Dairy Producers Association and American Dairy Association Mideast. “Waterman will offer students an opportunity to work with and learn about new technologies before entering the marketplace and will get consumers closer to where their food comes from.”

Current Waterman initiatives that will continue to play important roles include a honey bee research lab; a turfgrass research and education facility; a student-run farm; research plots; and the Garden of Hope, a collaboration with The Ohio State University Wexner Medical Center. The Garden of Hope is a 2.5-acre garden where cancer survivors grow and harvest fresh produce to promote healthy diets and reduce the risk of cancer complications.

Partnering with CFAES at several Garden of Hope research plots is Dr. Colleen Spees, of Ohio State’s College of Medicine. Her research is proving that healthful eating positively impacts cancer survivors’ quality of life, dietary and physical activity patterns, and health-related biomarkers.

“Waterman will be a place that makes agriculture visible to Ohio citizens of all ages and teaches them about modern food systems, technology, and environmental stewardship,” said Kress.

The fact that Waterman is located in the 14th largest city in the United States, within view of that city’s skyline, just adds to this treasure hidden in plain sight.

As Ohio State and CFAES continue to develop exciting plans for Waterman’s future, you can be a part of that re-envisioning process. A number of opportunities are available for space-naming and building-fund support. Contact Cindy Plummer at plummer.303@osu.edu for more information.
If you want to grow a money tree, this is it.

BRAD BERGEOFURD
OSU Extension horticulture specialist

IDEAS FOR GROWING

Promoting a fruit few have eaten

Ohio’s little-known, native fruit might gain more notice soon.

Extension recently launched Marketing and Orchard Resource Efficiency (MORE) Ohio Pawpaw, a statewide, grant-funded effort that teaches farmers how to establish productive pawpaw orchards and find markets for the tropical-tasting fruit.

Light green on the outside, a ripe pawpaw is about the size of a large potato. It tastes a little like a combination between banana, mango, and pineapple. It can also be soft like an avocado. Large black seeds have to be nudged out of a pawpaw before the light yellow fruit can be eaten.

Though the fruit is not widely known, there’s a pocket of pawpaw fans in southern Ohio, where an annual festival features pawpaw gelato, pawpaw chutney, pawpaw wine, and even pawpaw beer.

“I liked pawpaws a lot better the second time I tried them,” said Sarah Francino, a CFAES master’s degree student who has tasted and tested many varieties to try to help Ohio farmers determine the best ones to raise and sell.

If you’re not keen on how pawpaws taste, you might still be drawn to pawpaw trees for their bright yellowness in the fall, she said. “If you let them grow in the open, in full sun, they form a beautiful pyramid,” said Francino.

Francino is working for MORE Ohio Pawpaw, which is spearheaded by Matt Davies, a CFAES assistant professor, and Brad Bergefurd, an Extension horticulture specialist.

In Ohio, many prospective pawpaw growers don’t know enough about growing or selling pawpaws to invest in trying them, so MORE Ohio Pawpaw is working to change that, Bergefurd said.

Francino and others are evaluating new and traditional pawpaw varieties, nursery propagation, irrigation, fertility, insect and disease control methods, food safety, and marketing techniques. They are also studying ways to improve the productivity of the wild pawpaw patches found throughout Ohio’s forests.

Raising pawpaws could become another way for farmers across the state to boost their income, particularly in the state’s southern and western regions. There, the fruit grows abundantly in the wild, having adapted to climate and soil conditions.

A pawpaw orchard can produce $15,000 per acre for fresh fruit, $30,000 per acre for frozen pulp, and $5,000 per acre for seed, according to the Ohio Pawpaw Growers Association.

“If you want to grow a money tree, this is it,” Bergefurd said. “Right now, the market is there. As long as the farmer does a good job in establishing markets, the potential is there.”

MARCH/APRIL 2019 CFAES IMPACT
Feeding Ohio’s hungry

Extension’s Master Gardener Volunteers grew and donated about 56,100 pounds of fresh produce to Ohio communities in 2018 as part of its ongoing GROW Ohio-Feed the Hungry initiative. That converts to about 47,000 meals for Ohioans, said Pam Bennett, who runs the Master Gardener Volunteer program. The food is donated to food pantries, food banks, and other nonprofits that provide healthy foods to Ohioans.

Live Smart Ohio blog

Want to learn more about budgeting? Wondering how to prevent foodborne illnesses? Want to better manage stress? These answers and more are available through the Live Smart Ohio website (livesmartohio.osu.edu), which offers a consumer blog written by Extension’s family and consumer sciences professionals. Focusing on building healthy people, healthy relationships, and healthy finances through research-based information on money, food, mind and body, and family and relationships, the blog promotes health and wellness statewide.

Test before planting

Before planting this spring, consider a soil test, which can help diagnose what, if any, nutrients might be missing from your garden. Soil samples can be taken at any time of the year. You can find out how to get your own soil tested by contacting your local OSU Extension office at extension.osu.edu/lao.

You can grow lettuce early, and in containers

Want to grow your own greens? Early spring can be a good time to start. “Lettuce can tolerate cool soil and weather, so you can plant seeds in a well-prepared seedbed as much as four weeks before your last frost date,” said Master Gardener Volunteer Faye Mahaffey. If you have limited space or mobility, you can easily grow lettuce in pots, compact salad boxes, and easy-to-reach salad tables. For more, visit go.osu.edu/EarlySpringLettuce and mastergardener.osu.edu.

Improving Ohio’s water

CFAES will soon launch a new program aimed at continuing and focusing the college’s ongoing efforts to improve Ohio’s water. The proposed Water Quality Initiative, which is currently being finalized, will target the state’s critical water issues, including Lake Erie’s harmful algal blooms and urban stormwater runoff. Its goal is to boost the speed and impact of CFAES’ work on those issues, and in doing so, benefit Ohio’s water, farms, and people. To learn more, visit waterquality.osu.edu.